

REMARKS

This Amendment is submitted in response to the Final Office Action mailed on April 22, 2003. Claims 1, 8, 21, 25 and 31 have been amended, and claims 1, 2, 6-14, 18-21 and 23-41 remain in the present application. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Claims 1-2, 6-14, 18-21 and 23-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Claes et al., U.S. Patent No. 5,326,138. Claims 1, 6-8 and 18-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP6-185681. While Applicants respectfully traverse these rejections, Applicants have amended each of independent claims 1, 8, 21, 25 and 31 to more sharply define the present invention over the prior art of record and respectfully request that the rejections be withdrawn.

In particular, Applicants have amended each of independent claims 1, 8, 21, 25 and 31 to recite that the cylindrical metal sleeve has a rigid and radially inwardly directed annular corrugation on a first side of the sleeve that is oriented perpendicular to a longitudinal axis of the sleeve and is adapted to cooperatively engage the annular corrugation on the first pipe section end to secure the sleeve on the first pipe section and thereby prevent separation of the sleeve from the first pipe section.

In the Response to Arguments section of the Office Action, the Examiner takes the position that the corrugation (44, 50) of Claes et al. is adapted to cooperatively engage the annular corrugation on the first pipe section via the gasket element (30). However, the annular corrugation (44, 50) of Claes et al. is a radially outwardly directed groove and Applicants respectfully submit that there is no teaching or suggestion in Claes et al. taken alone, or in combination with the other prior art of record, of a rigid and inwardly directed annular corrugation on the sleeve to engage the annular corrugation on the first pipe section end as recited now in each of amended independent claims 1, 8, 21, 25 and 31. Accordingly, Applicants respectfully request that the rejections of independent claims 1, 8, 21, 25 and 31 as being unpatentable over Claes et al. be withdrawn.

With respect to the Japanese reference, Applicants previously filed an uncertified English translation of that reference with the Amendment mailed on January 13, 2003. As described in that English translation, the plastic sleeve (S₂) of the Japanese reference is "blow molded" onto the end of the double-wall pipe (21). Applicants respectfully submit that the Japanese reference does not disclose a metal sleeve as claimed by Applicants and there is no teaching or suggestion to modify this reference to comprise a metal sleeve since this would completely destroy the intended structure, purpose and function of the plastic sleeve (S₂) of the Japanese reference which is intended to be blow molded onto the end of the double-wall pipe.

With respect to the annular corrugation on the right side of the coupling shown in Fig. 7 of the Japanese reference, the annular corrugation referred to by Examiner merely serves as an inward valley or stop to limit the extent of penetration of the pipe section end (41) into the sleeve (S_2). The annular corrugation shown in Fig. 7 of the Japanese reference does not engage the annular corrugation on the pipe section end (41) to secure the sleeve on the pipe section (41) to thereby prevent separation of the sleeve from the pipe section end as claimed by Applicants. It is clear that the corrugation shown in Fig. 7 of the Japanese reference does not secure the sleeve on the pipe section end (41) since the sleeve can be separated from the pipe section (41) simply by pulling the sleeve to the left and thereby separating the pipe section end (41) from the sleeve (S_2).

With respect to the corrugation (T_2) shown in Fig. 5 of the Japanese reference, Applicants respectfully submit that the Japanese reference is completely silent with respect to a metal sleeve as claimed by Applicants for the reasons noted above, and there is simply no teaching or suggestion to modify this reference to include a metal sleeve since this would clearly destroy the intended structure, purpose and function of the plastic sleeve (S_2) which is intended to be blow molded onto the end of the double-wall pipe (21). Accordingly, Applicants respectfully request that the rejections of independent claims 1, 8, 21, 25 and 31 as being unpatentable over the Japanese reference be withdrawn.

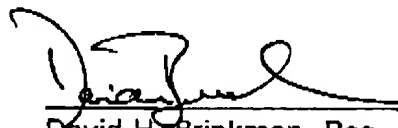
Moreover, claims 2, 6-7, 9-14, 18-20, 23-24, 26-30 and 32-41 depend from allowable independent claims 1, 8, 21, 25 and 31, respectively, and further as each of these claims recites a combination of elements not disclosed or suggested as prior art of record, Applicants respectfully submit that these claims are allowable as well.

Conclusion

In view of the foregoing response including the amendments and remarks, this application is submitted to be in complete condition for allowance and early notice to this affect is earnestly solicited. If there is any issue that remains which may be resolved by telephone conference, the Examiner is invited to contact the undersigned in order to resolve the same and expedite the allowance of this application.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.



David H. Brinkman, Reg. No. 40,532

2700 Carew Tower
441 Vine Street
Cincinnati, Ohio 45202
(513) 241-2324 - Voice
(513) 421-7269 - Facsimile